

## **Appendix L**

---

### Asbestos-Containing Materials Survey





February 8, 2012

Nate Arnold - LEED AP  
Construction Project Manager  
University of Southern California  
Real Estate & Asset Management  
3335 S. Figueroa, Unit G  
Los Angeles, CA 90007

**RE: LA Sports Arena – Limited Asbestos Testing Results**

Dear Mr. Arnold:

At the request of the University of Southern California (USC), Real Estate & Asset Management, Vista Environmental Consulting, Inc. (VEC) performed a limited asbestos-containing materials survey of representative areas of the Los Angeles Sports Arena, Los Angeles, California (Project Site).

The survey was performed to identify “large-ticket” items suspected of being asbestos-containing. The limited, representative survey was performed on January 25, 2012 by VEC employee Mr. Michael C. Legerski.

The results of the limited, representative survey indicate that the following asbestos-containing materials were identified:

**L.A. Sports Arena**

MATERIAL	DESCRIPTION	LOCATION	CONTAMINANT	ESTIMATED QUANTITY <sup>1</sup>
Acoustical Ceiling Materials	White/Tan on Plaster	Throughout Lower Level and Concourse Walkways & Lobbies	Asbestos	~ 50,000 SF
Roofing Materials	Black Roofing, under White Elastomeric Roof	Roof	Asbestos	~ 30,000 SF
Mastic a/w 12” White Uniform Hole Patterned Ceiling Tiles	Brown	Above Ceilings in Offices & in Mechanical Areas	Asbestos	~ 7,500 SF
9” Vinyl Floor Tile & Mastic	Green	Suite 28??	Asbestos	~ 1,000 SF
Thermal Systems Fitting Insulation (assumed)	Tan	Throughout Facility	Asbestos	~ 300 EA

<sup>1</sup> Order of Magnitude **ESTIMATED** Quantities and Locations. It is the sole responsibility of the contractor to verify quantities and locations of hazardous materials in the path of construction through site visits and contractual bid set documents, including, but not limited to all specifications, drawings, and addenda. Any discrepancies between the contractual bid set documents and site visits must be submitted in writing **PRIOR** to bidding

## **METHODOLOGY**

VEC performed the hazardous materials survey on January 25, 2012. The sampling and investigation were performed by Mr. Michael C. Legerski. Mr. Legerski is a Cal/OSHA Certified Asbestos Consultant (#94-1433) and a Lead-Related Construction Inspector & Assessor (#I-6353) as issued by the State of California Department of Public Health (CDPH).

### **Asbestos**

The asbestos survey performed was targeted at “large-ticket” items only and was not a comprehensive survey of the facility. For the materials sampled the asbestos survey was performed generally in accordance with the AHERA protocol (40 CFR Part 763, Subpart E). Visual identification was performed by assessing visible and accessible structural, architectural, and mechanical components that may be impacted as part of this specific project, for the presence of suspect ACM at the Project Site. Each identified suspect asbestos-containing material (ACM) was sampled in accordance with procedures established by the United States Environmental Protection Agency (USEPA).

***The survey performed was not comprehensive and not intrusive and did NOT include access and sampling of areas which required reasonable demolition to access as required by SCAQMD Rule 1403.***

Not all wall voids, plenums, and crawl spaces were accessed during this survey. Quantities and locations are based upon areas that were accessed. Materials similar those in this report may be present in areas which were not accessed. Subsurface areas were not part of this survey.

Suspect ACM samples were delivered, under chain-of-custody, to AmeriSci Laboratories 24416 S. Main Street, Suite 308, Carson, California, 90745 (310.834.4868). AmeriSci Laboratories is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP#200346-0) and the California Environmental Laboratory Accreditation Program (Cal-ELAP#2322).

The samples were submitted for analysis by Polarized Light Microscopy (PLM) utilizing dispersion staining techniques in accordance with the EPA’s “Method for the Determination of Asbestos in Bulk Building Materials” U.S. EPA/600/R-93/116, Visual Area Estimate, dated July 1993 and adopted by the NVLAP as Test Method Code 18/A01.

## **RESULTS**

### **Asbestos**

The results of the bulk samples collected for asbestos, and analyzed by PLM or assumed materials, indicate that detectable concentrations of asbestos **are present** in the following materials:

**L.A. Sports Arena**

ID	MATERIAL	DESCRIPTION	LOCATION	CAL/OSHA CLASS	SCAQMD CLASS
A	Acoustical Ceiling Materials	White/Tan on Plaster	Throughout Lower Level and Concourse Walkways & Lobbies	Class II	Class II – Non-Friable
B	Roofing Materials	Black Roofing, under White Elastomeric Roof	Roof	Asbestos	~ 30,000 SF
C	Mastic a/w 12” White Uniform Hole Patterned Ceiling Tiles	Brown	Above Ceilings in Offices & in Mechanical Areas	Asbestos	~ 7,500 SF
D	9” Vinyl Floor Tile & Mastic	Green	Suite 28??	Asbestos	~ 1,000 SF
G	Thermal Systems Fitting Insulation (assumed)	Tan	Throughout Facility	Asbestos	~ 300 EA

The results of the bulk samples collected for asbestos, and analyzed by PLM indicate that detectable concentrations of asbestos **were not present** in the following materials:

**L.A. Sports Arena**

ID	MATERIAL	DESCRIPTION	NUMBER OF SAMPLES
D	Plaster Walls/Ceilings	Finished	1
F	Exterior Window Louvers	Tan/Grey	1

Individual sampling and analytical results can be found attached to this report.

**CONCLUSIONS AND RECOMENDATIONS**

**Asbestos**

The results of the survey indicate that asbestos-containing materials **are present** at the Project Site.

Work performed during any activities (i.e. drilling, cutting, sanding, scraping) that disturb the asbestos-containing materials identified in this report must be done in compliance with the most recent edition of all applicable federal, state, and local regulations, standards, and codes governing abatement, transport, and disposal of asbestos-containing materials.

Materials encountered in the building that are not part of this report must be properly sampled for the content of asbestos or assumed to be asbestos containing prior to any disturbance.

Prior to activities which will disturb identified or assumed ACM, a Cal/OSHA registered and California licensed asbestos contractor must be utilized for abatement of ACM that will be impacted. VEC recommends that all abatement operations be conducted under the direction of a California Certified Asbestos Consultant.

Removal of  $\geq 100$  square feet of identified or suspected asbestos-containing materials requires a 14 calendar day written notification to the South Coast Air Quality Management District (SCAQMD), notification to Cal-OSHA in writing at least 24 hours prior to the initiation of such activities, and obtaining the appropriate Los Angeles Fire Department (LAFD) permit.

Notification to employees and contractors working within the building should be made in accordance with the California Health and Safety Code, Section 25915 *et. seq.* and Proposition 65.

Since the survey performed was not a comprehensive survey as required by the South Coast Air Quality Management District's (SCAQMD) Rule 1403, VEC recommends a comprehensive follow-up survey should be accomplished prior to any construction activities within the Project Site.

If the facility is to be demolished, then the survey to be accomplished must utilize destructive testing techniques as required by SCAQMD Rule 1403.

#### Lead Waste Initial Characterization

VEC recommends that a comprehensive survey for the identification of lead be accomplished prior to activities that at impact or disturb existing building materials.

The lead survey should also include initial waste characterization of materials likely to be impacted to determine the proper manifesting, disposal and/or treatment requirements.

#### Devices with Potential Hazardous Materials

VEC's recommends that a visual survey be accomplished to identify other commonly encountered building related hazardous materials that could impact scope, schedule and budget.

#### LIMITATIONS AND EXCLUSIONS

The survey performed was limited to "large-ticket", accessible, suspect asbestos-containing materials and the testing of representative areas as designated by USC – Real Estate & Asset Management. Subsurface investigations were not included as part of this investigation, nor were areas outside of the specific areas identified in this scope of work.


**All material quantities reported herein are rough order of magnitude estimates and should not be used for bidding purposes. All contractors are responsible for accurately determining quantities and locations of materials identified in this report.**

Findings, conclusions, recommendations and analytical data offered in this report have been derived from reviewing existing information provided by the client, visual survey of the representative, accessible building materials and systems, and the outcome of sampling and analysis of suspect materials.

If materials having characteristics in common with those identified in this report or if other forms of suspect hazardous materials are discovered during work activities, maintenance personnel and/or contractors should be instructed to immediately cease work activities which may initiate an exposure episode, and notify the appropriate management personnel.

If you have any questions concerning the information contained in this report, please contact me on my cell at 213.440.3129.

Respectfully Submitted,  
**Vista Environmental Consulting, Inc.**

A handwritten signature in black ink, appearing to read "Michael C. Legerski".

Michael C. Legerski MSIH  
Principal  
Certified Asbestos Consultant #94-1433  
CDPH Lead Certification #I/M-6353

Attachments

**AmeriSci Los Angeles**

24416 S. Main Street, Ste 308  
Carson, California 90745  
TEL: (310) 834-4868 • FAX: (310) 834-4772

**PLM Bulk Asbestos Report**

Vista Environmental Consulting, Inc  
Attn: Michael Cardone  
950 N. Tustin Avenue  
Suite 140  
Anaheim, CA 92807

**Date Received** 01/26/12    **AmeriSci Job #** 912011901  
**Date Examined** 01/26/12    **P.O. #**  
**Page** 1 **of** 4  
**RE:** 1220205; University of Southern California; Sports Arena

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
SA-A-1	912011901-01	No	NAD
Location: SAACM / Plaster White / Loge 14/15 Slope Ceiling @ Stairs			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: White, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
SA-A-2	912011901-02	Yes	4 %
Location: SAACM / Plaster White / Loge 14/15 Sloped C to Lobby			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Tan/White, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types: Chrysotile 4.0 %			
Other Material: Non-fibrous 96 %			
SA-A-3	912011901-03	Yes	4 %
Location: SAACM / Plaster White / Loge 28A-29 Sloped C Lobby			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Tan/White, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types: Chrysotile 4.0 %			
Other Material: Non-fibrous 96 %			
SA-A-4	912011901-04	No	NAD
Location: SAACM / Plaster White / OS Loge 9 @ Lobby			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
SA-A-5	912011901-05	No	NAD
Location: SAACM / Plaster White / OS Loge 8 @ Lobby			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Beige, Heterogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

**PLM Bulk Asbestos Report**

1220205; University of Southern California; Sports Arena

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
SA-A-6	912011901-06	<b>Yes</b>	3 %
<b>Location:</b> SAACM / Plaster White / 6-6A Sloped Ceiling Upstairs			(by CVES) by Paola Ducoing on 01/26/12
<b>Analyst Description:</b> White, Homogeneous, Non-Fibrous, Bulk Material			
<b>Asbestos Types:</b> Chrysotile 3.0 %			
<b>Other Material:</b> Non-fibrous 97 %			
SA-A-7	912011901-07	<b>No</b>	NAD
<b>Location:</b> SAACM / Plaster White / Section 19 @ Floor Level			(by CVES) by Paola Ducoing on 01/26/12
<b>Analyst Description:</b> Off-White, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Non-fibrous 100 %			
SA-A-8	912011901-08	<b>No</b>	NAD
<b>Location:</b> SAACM / Plaster White / OS Section 28-Floor			(by CVES) by Paola Ducoing on 01/26/12
<b>Analyst Description:</b> Off-White, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Non-fibrous 100 %			
SA-A-9	912011901-09	<b>No</b>	NAD
<b>Location:</b> OS Section 3 Floor Level			(by CVES) by Paola Ducoing on 01/26/12
<b>Analyst Description:</b> Off-White, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Non-fibrous 100 %			
SA-B-1	912011901-10	<b>Yes</b>	8 %
<b>Location:</b> Roof Comp / White/Black / @ Access Hatch			(by CVES) by Paola Ducoing on 01/26/12
<b>Analyst Description:</b> Black/Grey, Heterogeneous, Non-Fibrous, Roofing			
<b>Asbestos Types:</b> Chrysotile 8.0 %			
<b>Other Material:</b> Cellulose 45 %, Non-fibrous 47 %			
SA-C-1	912011901-11.1	<b>No</b>	NAD
<b>Location:</b> ACT/M/PI / 12" U.H. White/Brn/Tan / Upper Level Hall to Roof			(by CVES) by Paola Ducoing on 01/26/12
<b>Analyst Description:</b> White/Brown, Heterogeneous, Fibrous, Ceiling Tile			
<b>Asbestos Types:</b>			
<b>Other Material:</b> Cellulose 90 %, Non-fibrous 10 %			



Client Name: Vista Environmental Consulting, Inc

**PLM Bulk Asbestos Report**

1220205; University of Southern California; Sports Arena

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
SA-C-1	912011901-11.2	Yes	Trace (<1 %)
Location: ACT/M/PI / 12" U.H. White/Brn/Tan / Upper Level Hall to Roof			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types: Tremolite <1. %			
Other Material: Non-fibrous 100 %			
SA-C-2	912011901-12.1	No	NAD
Location: ACT/M/PI / 12" U.H. White/Brn/Tan / Elec Closet OS-19			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: White/Brown, Heterogeneous, Fibrous, Ceiling Tile			
Asbestos Types:			
Other Material: Cellulose 90 %, Non-fibrous 10 %			
SA-C-2	912011901-12.2	Yes	Trace (<1 %)
Location: ACT/M/PI / 12" U.H. White/Brn/Tan / Elec Closet OS-19			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Dark Brown, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types: Tremolite <1. %			
Other Material: Non-fibrous 100 %			
SA-D-1	912011901-13	No	NAD
Location: Plaster / Ceiling / Luxury Suite @ Center			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: White, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
SA-E-1	912011901-14	No	NAD
Location: A/C / Gray / Window Lower Suite 28			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Brown, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 75 %, Non-fibrous 25 %			
SA-F-1	912011901-15.1	Yes	3 %
Location: VFT/M / 9" Green / Suite 28 Medical			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Grey, Homogeneous, Non-Fibrous, Floor Tile			
Asbestos Types: Chrysotile 3.0 %			
Other Material: Non-fibrous 97 %			

Client Name: Vista Environmental Consulting, Inc

## PLM Bulk Asbestos Report

1220205; University of Southern California; Sports Arena

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
SA-F-1	912011901-15.2	Yes	5 %
Location: VFT/M / 9" Green / Suite 28 Medical			(by CVES) by Paola Ducoing on 01/26/12
Analyst Description: Black, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types: Chrysotile 5.0 %			
Other Material: Non-fibrous 95 %			

**Reporting Notes:**Analyzed By: Paola Ducoing ; Date Analyzed: 1/26/2012 1/26/12

\*NAD = no asbestos detected; Detection Limit <1%; Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; NA = not analyzed; NA/PS = not analyzed / positive stop; NVA = No Visible Asbestos; PLM (polarized light microscopy) Bulk Asbestos Analysis by EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab #200346-0, CA ELAP lab #2322); Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full with the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By:  1/26/12



# ASBESTOS BULK SAMPLE LOG

950 N. TUSTIN AVE., SUITE 800  
ANAHEIM, CA 92807  
TEL 714.238.0009  
FAX 714.238.0020

912011901

CLIENT: University of Southern California

DATE: 1/26/12

LOCATION: Sports Arena

PROJECT NUMBER: 1220205

SAMPLED BY: M. Legerski

CAC OR SST No: CAC 94-1433

BUILDING	HOMO AREA ID	NUMBER	MATERIAL	DESCRIPTION	LOCATION	QUANTITY (SF/LF/EA)
SA	A	1	SSACM	plaster white	loge 14115 slope ceiling & stairs	
		2			loge 14115 sloped C to lobby	
		3			loge 28A-28 sloped C to lobby	
		4			O.S. loge 9 @ Lobby	
		5			O.S. loge 8 @ Lobby	
		6			6-6A sloped ceiling up stairs	
		7			Section 19 @ Floor level	
		8			O.S. Section 28 - Floor	
		9	<del>Roof</del>	<del>white / black</del>	O.S. Section 3 Floor level	
SA	B	1	Roof Comp	white / black	@ Access Hatch	

ANALYTICAL METHOD: PLM      TURNAROUND TIME: SAME DAY 24HR 48 HR 3 DAY  
DATA TO: MICHAEL LEGERSKI E-MAIL: MIKE@VISTA-ENV.COM PHONE: 213.440.3129

SPECIAL INSTRUCTIONS: \_\_\_\_\_

## CHAIN OF CUSTODY:

1. [Signature]  
TRANSFER SIGNATURE

Michael C. Legerski  
PRINTED NAME

1/26/12  
DATE/TIME

2. [Signature]  
TRANSFER SIGNATURE

M. DAVID  
PRINTED NAME

1/26/12 0800  
DATE/TIME

3. \_\_\_\_\_  
TRANSFER SIGNATURE

PRINTED NAME

DATE/TIME

PAGE 1 OF 2



VISTA ENVIRONMENTAL  
CONSULTING

# ASBESTOS BULK SAMPLE LOG

950 N. TUSTIN AVE., SUITE 800  
ANAHEIM, CA 92807  
TEL 714.238.0009  
FAX 714.238.0020

912011901

CLIENT: University of Southern California

DATE: <sup>25</sup>1/26/12

LOCATION: Sports Arena

PROJECT NUMBER: 1220205

SAMPLED BY: M. Legerski

CAC OR SST NO: CAC 94-1433

BUILDING	HOMO AREA ID	NUMBER	MATERIAL	DESCRIPTION	LOCATION	QUANTITY (SF/LF/EA)
SA	C	1	Asb/m/pl	12" H. H. white/brown/tan	Upper level hall to Rm 28	
	C	2	L	L	Elec closet OS-19	
	D	1	plaster	ceiling	Industry Suite 2 Center	
	E	1	Alc	gray	window lower suite 28	
	F	1	VFA/m	g <sup>n</sup> green	Suite 28 Medical	
SA						

ANALYTICAL METHOD: PLM

TURNAROUND TIME:

SAME DAY 24HR 48 HR 3 DAY

DATA TO: MICHAEL LEGERSKI E-MAIL: [MIKE@VISTA-ENV.COM](mailto:MIKE@VISTA-ENV.COM) PHONE: 213.440.3129

SPECIAL INSTRUCTIONS:

## CHAIN OF CUSTODY:

1. [Signature]  
TRANSFER SIGNATURE

Michael C. Legerski  
PRINTED NAME

1/26/12  
DATE/TIME

2. [Signature]  
TRANSFER SIGNATURE

M. DAVID  
PRINTED NAME

1/26/12 @ 0800  
DATE/TIME

3. \_\_\_\_\_  
TRANSFER SIGNATURE

PRINTED NAME

DATE/TIME